

1990 Baseline: Emissions from Imported Power

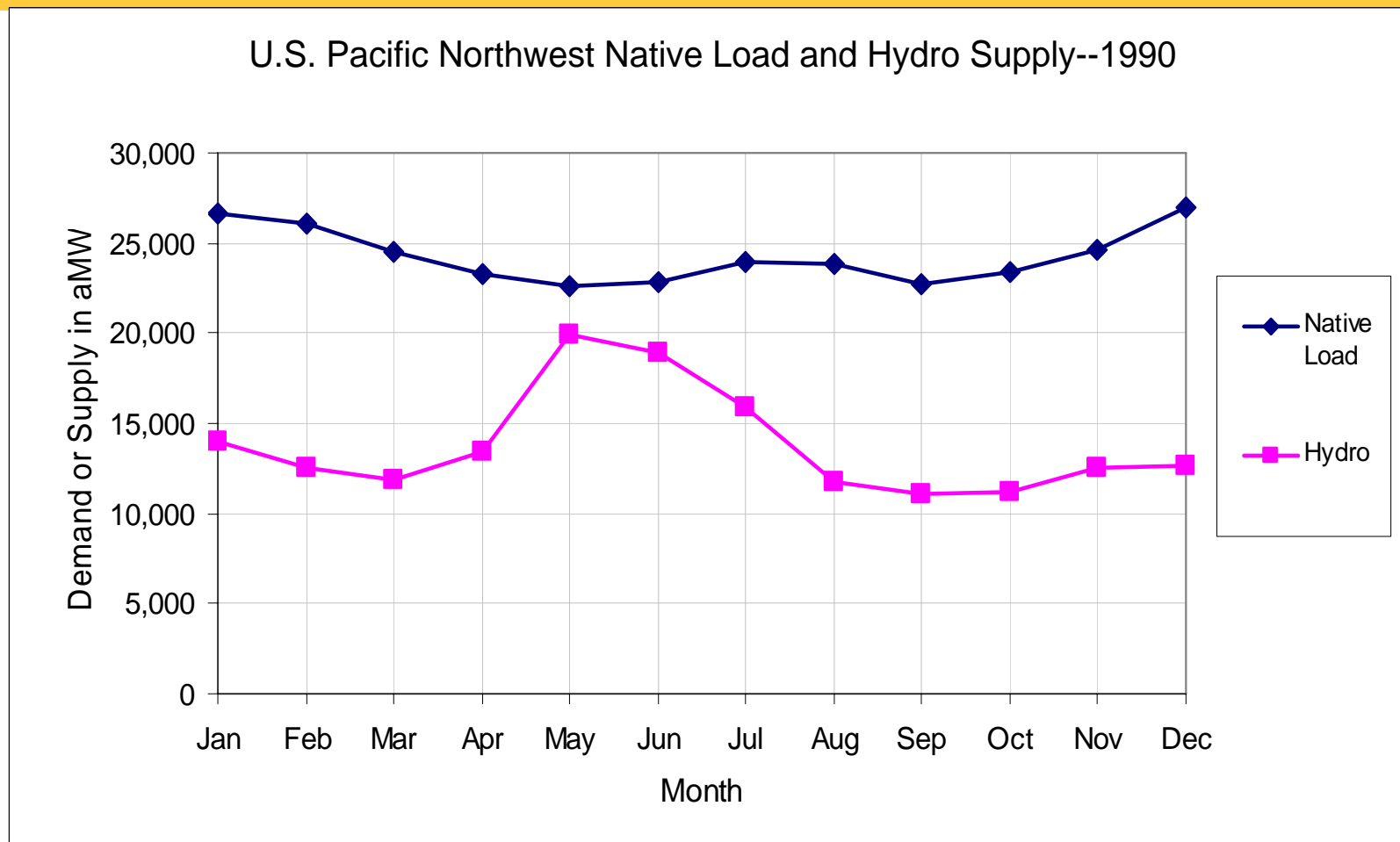


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Resource Mix for Unspecified Imports

- “Unspecified imports” are those that cannot be tracked, via ownership or contract, to a specific power plant.
- For such imports in the 1990 baseline, CEC methodology assumes a resource mix:
 - Northwest: 80% hydro, 20% coal
 - Southwest: 26% hydro, 74% coal
 - Source: CEC-700-2007-007, March 2007, p. B-1
- PG&E believes this attribution to hydro is too high.

Northwest Demand and Hydro--1990



- Outside Spring months, hydroelectric supply met ~50% of NW native load. Why would Northwest export it to California?
- Sources: 1990 annual load from NERC, given monthly shape from 1997-1999 data because 1990 monthly loads were not available. Hydroelectric data from EIA, forwarded by CEC.

California as Marginal Demand

If California ceased buying surplus electricity from the Northwest, what would happen?

- First hours or days: Northwest entities would cut back hydroelectric generation and save or (occasionally) spill water, because hydro plants have greater operating flexibility than fossil plants.
- Medium term and long-term: Northwest entities with surplus hydro would sell it to Northwest entities without such surplus. Both entities profit by such deals: Sellers receive \$ for hydro, and buyers save \$ by substituting hydroelectricity for more expensive fossil-fueled electricity.

If California then resumed buying surplus electricity from the Northwest, what would happen?

- First hours or days: Northwest entities would increase hydroelectric generation, because hydro plants have greater operating flexibility than fossil plants.
- Medium term and long-term: Northwest entities with surplus hydro would stop selling in NW, and sell to California, where prices are higher. Northwest entities cut off from surplus hydro would increase generation from fossil-fueled plants.